

**Design Requirements For  
The Residential Code of New York State-2007  
City of Yonkers**

**TABLE R301.2(1)  
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

Ground Snow Load <sup>k</sup> (psf)	Wind	Seismic Design Category <sup>g</sup>	Subject to Damage From				Winter Design Temp. <sup>f</sup>	Ice Shield Underlayment Required <sup>i</sup>	Flood Hazards <sup>h</sup>	Air Freezing Index <sup>j</sup>
	Speed <sup>e</sup> (MPH)		Weathering <sup>a</sup>	Frost Line Depth <sup>b</sup>	Termite <sup>c</sup>	Decay <sup>d</sup>				
20	110	C	Severe	3'-6"	Moderate to Heavy	Slight to Moderate	7	YES	(a) 7/09/1980 (b) 4/11/2000 (c) 9/25/2007 For FIRM map Dated 9/28/2007	618

For SI: 1 pound per square foot = 0.0479 kN/m.<sup>2</sup>, 1 mile per hour = 1.609 km/h.

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
- b. The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table with "very heavy," "moderate to heavy," "slight to moderate," or "none to slight" in accordance with Figure R301.2(6) depending on whether there has been a history of local damage.
- d. The jurisdiction shall fill in this part of the table with "moderate to severe," "slight to moderate," or "none to slight" in accordance with Figure R301.2(7) depending on whether there has been a history of local damage.
- e. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(4)]. Wind exposure category shall be determined on a site-specific basis in accordance with §R301.2.1.4.
- f. The jurisdiction shall fill in this part of the table with the "Winter Design Dry-Bulb Temperature" determined from Table N1101.2.
- g. The jurisdiction shall fill in this part of the table with the Seismic Design Category determined from §R301.2.2.1.
- h. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the currently effective FIRM and FBFM, or other flood hazard map adopted by the community, as may be amended.
- i. In accordance with Sections R905.2.7.1, R905.4.3, R905.5.3, R905.6.3, R905.7.3 and R905.8.3, for areas where the average daily temperature in January is 25° F (-4° C) or less, or where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."
- j. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Table R403.3(1).
- k. The ground snow loads to be used in determining the design snow loads for roofs are given in Figure R301.2(5) for sites at elevations up to 1000 feet. Sites at elevations above 1000 feet shall have their ground snow load increased from the mapped value by 2 psf for every 100 feet above 1000 feet.